TASK FORCE WEB

Building a User Facing Service (UFS)

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Agenda

- Application Registration Metadata and portal configuration.
- Code examples of UFS that generate Reference, External Content, and Content Integration Portlets.
  - Application Metadata for each type
  - HTML examples for each type
  - XML example for Content Integration
  - “View Source” as a learning tool

Application Registration Metadata

- Registration and configuration metadata needs to be provided for each UFS.
- The developer needs an understanding of the metadata options and its relation to the application configuration.
- The metadata is used to configure your UFS in the portal.
- Only the subset of metadata that relates to UFS development is presented here.
- The N.E.D. developers have provided a minimum configuration for each integration type. There are many other possible implementations, be creative!

Application Registration Metadata

Application and Service Registration Metadata	
Service Name	A short, concise name that logically describes the Service
Service Description	A brief description of the functionality and/or information provided by the Service.
Version	The version of the Service that is deployed on the host application\web server.
Binding Type	Describes the type of binding the Portal uses to communicate with the Service. Select from: HTTP or WSDL
HTTP Access Point URL	If the Binding Type is HTTP, the Service owner must submit the fully qualified URL to the entry point of the Service.
WSDL URL	If the Binding Type is WSDL, the Service owner must submit the fully qualified URL to the WSDL that describes the Web Service

Application Registration Metadata (cont)

Send PRI	Flag Indicating whether or not the PRI data is added to the request sent to the service. The method used to pass the PRI data is dependent upon the type of invocation used. The PRI data message is attached to the HTTP header for standard HTTP calls and if SOAP is used, is embedded in a SOAP header.
Send Identity	Flag Indicating whether the Portal passes the HTTP authentication header from the original client request to the service being called.
Insert Style	Flag Indicating whether the Portal inserts the appropriate Portal CSS into the HTML return stream, thus automatically handling the Portal Look and Feel
Rewrite URLs	Flag Indicating whether the Portal attempts to rewrite URL references in the return stream to proxy all requests back through the portal
Content Mime Type	Optional. The MIME Type of the content being returned to the portal from the Service. Specifying the mime-type on this parameter can increase efficiency as the logic that attempts to determine the mime-type can be avoided.
Render XML	Optional. Flag Indicating whether the Portal attempts to render XML using an XSLT style sheet reference embedded in the XML document. Setting this to N allows a service to pass the raw XML to the client to support client side rendering.

N.E.D. Reference Integration Approach

- Does not modify existing N.E.D. application
- Build a simple HTML-based UFS that references the existing N.E.D. application.
- Use a downsized N.E.D. graphic logo to better fit in small portlet windows.

N.E.D. Reference Integration Metadata

Application and Service Registration Metadata	
Service Name	Navy Enterprise Dictionary (Reference Integration)
Service Description	A dictionary of common words.
Version	1.0
Binding Type	HTTP
HTTP Access Point URL	https://ned.spawar.navy.mil/reference
WSDL URL	n/a
Send PRI	No
Send Identity	No
Insert Style	No
Rewrite URLs	No
Content Mime Type	n/a
Render XML	n/a
Required Parameters	None

N.E.D. Reference Integration HTML file

```
<html>
<head>
          <title>Naval Enterprise Dictionary - Reference Integration Portlet</title>
          <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
          <base href="https://ned.spawar.navy.mil/reference/">
</head>

<body bgcolor="#FFFFFF">
<a href="../dictionary/dictionary.htm" target="_new">
          <img src="NED-Logo.gif" width="125" height="130" border="0" alt=""> <br>
          <font face="Georgia, Times New Roman, Times, serif" size="4">
          Naval Enterprise Dictionary (N.E.D.)</font>
</a>
</body>
</html>
```

File URL: https://ned.spawar.navy.mil/reference/index.html

N.E.D. Reference Integration "View Source"

```
<html>
<head>
          <title>Naval Enterprise Dictionary - Reference Integration Portlet</title>
          <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
          <base href="https://ned.spawar.navy.mil/reference/">
</head>

<body bgcolor="#FFFFFF">
<a href="../dictionary/dictionary.htm" target="_new">
          <img src="NED-Logo.gif" width="125" height="130" border="0" alt=""> <br>
          <font face="Georgia, Times New Roman, Times, serif" size="4">
          Naval Enterprise Dictionary (N.E.D.)</font>
</a>
</body>
</html>
```

File URL (as reported by browser):
https://www.homeport.navy.mil/servlet/PortalConnector?template=0&serviceKey=1E9BABA9-C88A-47A6-8C0C-EC96F88502D9&sendPRI=N&rewriteLinks=N

N.E.D. External Content Integration Approach

- Build a UFS with HTML output.
- The UFS is a modified version of the N.E.D application.
- Use a downsized N.E.D. graphic logo to better fit in small portlet windows.
- Modify text output for small portlet display area.
  - Minimize content scrolling
  - Portlets show top-level information. Use drill-down links, pop-up, or detached, windows to display lengthy or detailed information
- Allow the portal to rewrite URLs.

N.E.D. External Content Integration Metadata

Application and Service Registration Metadata	
Service Name	Navy Enterprise Dictionary (External Content Integration)
Service Description	A dictionary of common words.
Version	2.0
Binding Type	HTTP
HTTP Access Point URL	https://ned.spawar.navy.mil/ext_content
WSDL URL	n/a
Send PRI	No
Send Identity	No
Insert Style	No
Rewrite URLs	Yes
Content Mime Type	n/a
Render XML	n/a
Required Parameters	None

N.E.D. External Content Integration

HTML file (top frame only)

```
<html>
<head>
            <title>NED Header</title>
            <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
            <base href="https://ned.spawar.navy.mil/ext_content">
</head>
<body bgcolor="#FFFFFF">
<div align="center">
  <table width="100%" border="0" cellspacing="0" cellpadding="0">
    <tr>
      <td width="21%" height="92">
        <div align="center"><img src="NED-Logo.gif" width="125" height="130" align="middle"></div>
      </td>
      <td width="76%" height="92">
        <p align="center">
            <font size="5" color="#0000FF" face="Georgia, Times New Roman, Times, serif">
            Naval Enterprise Dictionary (N.E.D.)</font></p>
      </td>
    </tr>
  </table>
</div>
<p align="center"><font face="Georgia, Times New Roman, Times, serif" size="2">
  <a href="wb1913_a.html" target="bottomFrame">A</a> 
….omitted lines
  <a href="wb1913_z.html" target="bottomFrame">Z</a></font></p>
<hr>
</body>
</html>
```

File URL: https://ned.spawar.navy.mil/ext_content/ned_top.html

N.E.D. External Content Integration

```
<html>
<head>
  <title>NED Header</title>
  <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
  <base
href="https://www.homeport.navy.mil:443/servlet/PortalConnector/template=0/sendPRI=N@https://ned.spawar
.navy.mil/ext_content/">
</head>
<body bgcolor="#FFFFFF">
<div align="center">
  <table width="100%" border="0" cellspacing="0" cellpadding="0">
    <tr>
      <td width="21%" height="92">
        <div align="center"><img
src="https://www.homeport.navy.mil:443/servlet/PortalConnector/template=0/sendPRI=N@https://ned.spawar.
navy.mil/ext_content/NED-Logo.gif" width="125" height="130" align="middle"></div>
      </td>
      <td width="76%" height="92">
        <p align="center"><font size="5" color="#0000FF" face="Georgia, Times New Roman, Times,
serif">Naval
          Enterprise Dictionary
```

File URL (as reported by browser):
https://www.homeport.navy.mil/servlet/PortalConnector?
template=0/sendPRI=N@https://ned.spawar.navy.mil/ext_content/ned_top.html

```
<p align="center"><font face="Georgia, Times New Roman, Times, serif" size="2"><a
href="https://www.homeport.navy.mil:443/servlet/PortalConnector/template=0/sendPRI=N@https://ned.spawar
.navy.mil/ext_content/wb1913_a.html" target="bottomFrame">A</a> 
  <a
href="https://www.homeport.navy.mil:443/servlet/PortalConnector/template=0/sendPRI=N@https://ned.spawar
.navy.mil/ext_content/wb1913_z.html" target="bottomFrame">Z</a></font></p>
<hr>
</body>
</html>
```

N.E.D. Content Integration (HTML) Approach

- Same approach as External Content Integration, except:
  - Integrate N.E.D with the portal look-and-feel
    - Add Portal CSS reference
    - Remove <font> tags
    - Create N.E.D. specific CSS
  - Implement using Active Server Pages (ASP)

N.E.D Content Integration Metadata (HTML Version)

Application and Service Registration Metadata	
Service Name	Navy Enterprise Dictionary (Content Integration Portlet, HTML)
Service Description	A dictionary of common words.
Version	3.0
Binding Type	HTTP
HTTP Access Point URL	https://ned.spawar.navy.mil/content_integration
WSDL URL	n/a
Send PRI	Yes
Send Identity	No
Insert Style	No
Rewrite URLs	Yes
Content Mime Type	n/a
Render XML	n/a
Required Parameters	None

N.E.D. Content Integration (HTML)

```
<html>
<head>
<title>NED Header</title>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">

<!-- #include file="GetClientStyle.asp" -->
<!-- NED Specific Styles -->
<style type="text/css"> <!--
            .NEDTitle {
                        COLOR: #0000FF; FONT-FAMILY: Georgia, Times New Roman, Times, serif; FONT-SIZE: 14pt
            } -->
</style>
<base href="https://ned.spawar.navy.mil/content_integration/">
</head>
<body>
<div align="center">
  <table width="100%" border="0" cellspacing="0" cellpadding="0">
    <tr>
      <td width="21%" height="92">
        <div align="center"><img src="NED-Logo.gif" width="125" height="130" align="middle"></div>
      </td>
      <td width="76%" height="92">
        <p align="center" class="NEDTitle">Naval
        Enterprise Dictionary (N.E.D.)</p>
      </td>
    </tr>
  </table>
</div>
<p align="center"><a href="wb1913_a.asp" target="bottomFrame">A</a>  <a href="wb1913_z.asp"
target="bottomFrame">Z</a></p>
</body></html>
```

File URL: https://ned.spawar.navy.mil/content_integration/ned_top.asp

N.E.D. Content Integration (HTML)

```
<html><head><title>NED Header</title>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
<LINK REL="STYLESHEET" TYPE="TEXT/CSS"
HREF="https://www.homeport.navy.mil:443/servlet/PortalConnector/template=0/sendPRI=Y@https://www.homeport.nav
y.mil/servlet/media/templates/0/styles.css"/>
<!-- NED Specific Styles -->
<style type="text/css"> <!--
            .NEDTitle {
                        COLOR: #0000FF; FONT-FAMILY: Georgia, Times New Roman, Times, serif; FONT-SIZE: 14pt
            }           -->
</style>
<base
href="https://www.homeport.navy.mil:443/servlet/PortalConnector/template=0/sendPRI=Y@https://ned.spawar.navy.
mil/content_integration/">
</head>
<body><div align="center">
  <table width="100%" border="0" cellspacing="0" cellpadding="0">
    <tr>      <td width="21%" height="92">
        <div align="center">
          <img
src="https://www.homeport.navy.mil:443/servlet/PortalConnector/template=0/sendPRI=Y@https://ned.spawar.navy.m
il/content_integration/NED-Logo.gif" width="125" height="130" align="middle">
        </div>
      </td>
      <td width="76%" height="92">
        <p align="center" class="NEDTitle">Naval
        Enterprise Dictionary (N.E.D.)</p>
      </td>    </tr>
```

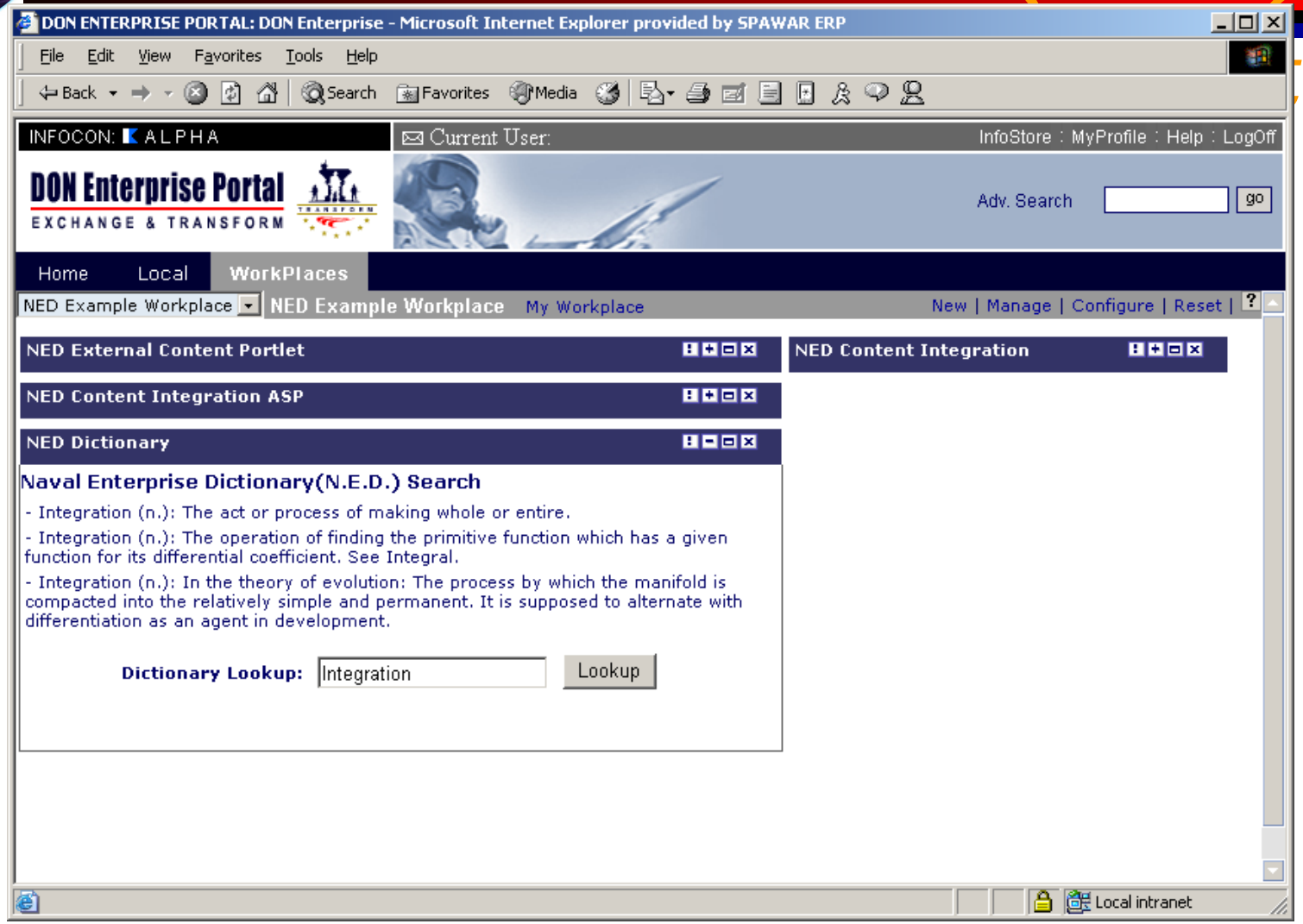
File URL (as reported by browser):
https://www.homeport.navy.mil/servlet/PortalConnector/template=0/sendPRI=Y@https://ned.spawar.navy.mil/content_integration/ned_top.asp

```
mil/content_integration/wb1913_z.asp" target="bottomFrame">Z</a></p>
</body></html>
```

N.E.D. Content Integration (XML) Approach

- Same approach as ASP/HTML example except:
  - Build a UFS with XML/XSL output.
  - Implement using Java Server Pages (JSP)
  - Further simplify the portlet with a search form and minimal text output.

N.E.D. Content Integration (XML)


DON ENTERPRISE PORTAL: DON Enterprise - Microsoft Internet Explorer provided by SPAWAR ERP
File Edit View Favorites Tools Help
Back Search Favorites Media
INFOCON: ALPHA
Current User:
InfoStore : MyProfile : Help : LogOff
DON Enterprise Portal
EXCHANGE & TRANSFORM
Adv. Search
go
Home
Local
WorkPlaces
NED Example Workplace
NED Example Workplace
My Workplace
New | Manage | Configure | Reset |
NED External Content Portlet
NED Content Integration
NED Content Integration ASP
NED Dictionary
Naval Enterprise Dictionary(N.E.D.) Search
- Integration (n.): The act or process of making whole or entire.
- Integration (n.): The operation of finding the primitive function which has a given function for its differential coefficient. See Integral.
- Integration (n.): In the theory of evolution: The process by which the manifold is compacted into the relatively simple and permanent. It is supposed to alternate with differentiation as an agent in development.
Dictionary Lookup:
Integration
Lookup
Local intranet

N.E.D Content Integration Metadata (XML Version)

Application and Service Registration Metadata	
Service Name	Navy Enterprise Dictionary (Content Integration Portlet, XML/XSL)
Service Description	A dictionary of common words.
Version	4.0
Binding Type	HTTP
HTTP Access Point URL	https://ned.spawar.navy.mil/content_integration_xml/dictionary.jsp
WSDL URL	n/a
Send PRI	Yes
Send Identity	No
Insert Style	No
Rewrite URLs	Yes
Content Mime Type	n/a
Render XML	Yes
Required Parameters	None

N.E.D. Content Integration (XML)

```
...omitted lines...
// ========================================================================== //
// Get search word parameter and choose which base xml file to load
// ========================================================================== //
            response.setContentType("text/xml");
            String searchpar = request.getParameter("word");
      String xmlfile;
      if (searchpar != null && !searchpar.equals(""))
        xmlfile = "wb1913_" + searchpar.charAt(0) + ".xml";
      else
                        // xml files per letter
      {
        xmlfile = "wb1913_n.xml";               // if no word, use the word 'nothing'
        searchpar = "nothing";
      }
      searchpar = new String(Character.toUpperCase(searchpar.charAt(0))
+searchpar.substring(1).toLowerCase());
// ========================================================================== //
// Load the xml files (base xml file + extra 'newwords' xml file)
// ========================================================================== //
...omitted lines...
                        ParseFile pf = new ParseFile(basedir + xmlfile);
                        if (searchpar == null)
                          searchpar = "";
                        pf.replace("##SearchPar##", searchpar);
                        if (tfw_style == null)
                                    tfw_style = "";
                        pf.replace("##tfw_style##", tfw_style);
                        String str;
                        sb.append(pf.toString());
...omit
```

File URL: https://ned.spawar.navy.mil/content_integration_xml/dictionary.jsp

N.E.D. Content Integration (XML)

Sample XML data File

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl"
href="https://ned.spawar.navy.mil/content_integration_xml/Dictionary.xsl"?>
<DICTIONARY>
<HEADER>
<CLIENTSTYLE>##tfw_style##</CLIENTSTYLE>
<SEARCHPARAM>##SearchPar##</SEARCHPARAM>
</HEADER>
<ENTRY><WORD>N</WORD><TYPE></TYPE>
<TEXT>the fourteenth letter of English alphabet, is a vocal consonent, and, in allusion to its mode of
formation, is called the dentinasal or linguanasal consonent. Its commoner sound is that heard in ran,
done; but when immediately followed in the same word by the sound of g hard or k (as in single, sink,
conquer), it usually represents the same sound as the digraph ng in sing, bring, etc. This is a simple
but related sound, and is called the gutturo-nasal consonent. See Guide to Pronunciation, // 243-
246.</TEXT>
</ENTRY>
<ENTRY><WORD>N</WORD><TYPE>n.</TYPE>
<TEXT>A measure of space equal to half an M (or em); an en.</TEXT>
</ENTRY>
<ENTRY><WORD>Nosology</WORD><TYPE>n.</TYPE>
<TEXT>That branch of medical science which treats of diseases, or of the classification of
diseases.</TEXT>
</ENTRY>
```

File URL: https://ned.spawar.navy.mil/content_integration_xml/wb1913_a.xml

N.E.D. Content Integration (XML)

XSL File

```
<?xml version='1.0'?>
<xsl:stylesheet version="1.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
<xsl:output method="html"/>
<xsl:variable name="searchpar"><xsl:value-of select="DICTIONARY/HEADER/SEARCHPARAM"/></xsl:variable>
<xsl:template match="/">
<html>
<head>
            <meta http-equiv="Content-Type" content="text/html; charset=UTF-8"/>
            <base href="https://ned.spawar.navy.mil/"/>
            <title>Naval Enterprise Dictionary(N.E.D.)</title>
            <meta content="text/html; charset=iso-8859-1" http-equiv="Content-Type"/>
            <xsl:value-of select="DICTIONARY/HEADER/CLIENTSTYLE"/>
</head>
<body leftmargin="0" topmargin="0" marginwidth="0" marginheight="0">
<table cellpadding="0" cellspacing="0" border="0">
            <tr>
            <th valign="middle" align="left" height="22" colspan="2">
            <p>Naval Enterprise Dictionary(N.E.D.) Search</p>
            </th>
            </tr>
            <tr valign="top" align="left">
            <td id="BlackCell" height="100%" colspan="2">
<table>
            <xsl:apply-templates select="DICTIONARY/ENTRY[WORD=$searchpar]"/>
</table>
</t
</t
…omitted lines..
```

File URL: https://ned.spawar.navy.mil/content_integration_xml/dictionary.xsl

N.E.D. Content Integration (XML)

```
<html>
<head>
            <META http-equiv="Content-Type" content="text/html; charset=UTF-8">
            <meta content="text/html; charset=UTF-8" http-equiv="Content-Type">
            <base
href="https://www.homeport.navy.mil:443/servlet/PortalConnector/template=0/sendPRI=Y@https://ned.spawar.navy.
mil/">
            <title>Naval Enterprise Dictionary(N.E.D.)</title>
            <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
            <LINK
HREF="https://www.homeport.navy.mil:443/servlet/PortalConnector/template=0/sendPRI=Y@https://www.homeport.spa
war.navy.mil/servlet/media/templates/0/styles.css" TYPE="TEXT/CSS" REL="STYLESHEET">
</head>
<body marginheight="0" marginwidth="0" topmargin="0" leftmargin="0">
<table border="0" cellspacing="0" cellpadding="0">
<tr>
<th colspan="2" height="22" align="left" valign="middle">
<p>Naval Enterprise Dictionary(N.E.D.) Search</p>
</th>
</tr>
<tr align="left" valign="top">
<td colspan="2" height="100%" id="BlackCell">
<table>
<tr>
<td width="82%">
 -
Integration (n.): The act or process of making whole or entire.<br>
</td>
</tr>
<tr>
<td width="8
 -
..omitted li
```

File URL (as reported by browser):
https://www.homeport.navy.mil/servlet/PortalConnector/template=0/sendPRI=Y@https://ned.spawar.navy.mil/content_integration_xml/dictionary.jsp